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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/940,401	08/27/2001	Francois Marquis	33904	4354

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PEARNE & GORDON LLP
1801 EAST 9TH STREET
SUITE 1200
CLEVELAND, OH 44114-3108

EXAMINER

FAULK, DEVONA E

ART UNIT	PAPER NUMBER
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2615

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 09/940,401	Applicant(s) MARQUIS ET AL.	
	Examiner Devona E. Faulk	Art Unit 2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. <u>1/23/2006</u> |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 12/13/2006 have been fully considered but they are not persuasive.
2. The applicant asserts that the compressor circuit of McGreevy is provided to improve the signal-to-noise characteristics of the FM transmitter and that there is not teaching that an audio signal is encoded in some way or that somehow the compressor acts as a decoder to generate a control signal from the audio signal. The examiner disagrees. The audio signal is from a CD which is implicitly encoded. Furthermore, the specification discloses, on page 10, that the audio source can be an audio player, CD player, MP3 player etc. As the examiner noted in the previous office action that a synonym of decode is to alter or change and the compressor serves to change. The examiner asserts that the examiner noted that McGreevy failed to disclose that the decoder outputs a control signal that controls at least one of a frequency band and a power level. Kuznicki was used to address that element. The applicant further asserts that McGreevy does not teach a control signal encoded in an audio signal. The examiner asserts that the applicant is arguing something that is not claimed.
3. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does

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not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

The applicant lastly asserts that the combination of McGreevy and Kuznicki can only result in hindsight reconstruction of the applicant's own disclosure. The examiner disagrees. Kuznicki discloses a wireless transmitter having a decoder whose output controls the frequency or power selection (Figure 3; column 5, lines 45-55). The examiner asserted in the previous office action that it would have been obvious to modify McGreevy so that the output of the decoder controls the frequency selection as taught by Kuznicki in order to have increased transmitter control capabilities. This motivation was taken from column 5, lines 45-55 and was not based on hindsight. The examiner is maintaining the rejection.

4. The examiner had an interview on 1/23/2006, with Aaron Fishman. He pointed out an error in the applicant's response and discussed the 112 rejection set forth in the previous office action. The 112 rejection set forth in the previous office action is withdrawn.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 1-6, 10-13** are rejected under 35 U.S.C. 103(a) as being unpatentable over McGreevy (US 5,319,716) in view of Kuznicki et al. (US 4,972,439).

Regarding claim 1, McGreevy discloses a wireless transmitter (Figure 1) comprising:

an antenna (52, figure 1);

a transmitter signal generator unit generating a signal to be transmitted to an output and having a control input, a control signal applied to said control input (BA 1404; column 2, lines 18-36; column 2, lines 35-38 and 58-60);

said output of said generator unit being operationally connected to an antenna (Figure 1);

an audio signal /control signal decoder unit (signal from CD player (left and right form the signal; column 1, lines 52-55) (compressor circuits, 10 and 12 form decoder; one synonym of decode is to alter or change and compressor serves to alter the signal); said decoder unit generating a control signal at an output of said decoder unit in response to an encoded audio signal at an input of said decoder unit (Figure 1);

said output of said decoder unit being operationally connected to said control input of said generator unit (Figure 1).

McGreevy teaches of the transmitter having a tuner and of frequency selection (column 3, line 8-18).

McGreevy fails to explicitly disclose that the output of the decoder generates a control signal that controls at least one of a frequency band and of a power level of said signal to be transmitted.

Kuznicki discloses a wireless transmitter having a decoder whose output controls the frequency or power selection (Figure 3; column 5, lines 45-55).

It would have been obvious to modify McGreevy so that the output of the decoder controls the frequency selection as taught by Kuznicki in order to have increased transmitter control capabilities.

Regarding **claim 2**, McGreevy as modified by Kuznicki discloses said input of said decoder unit being operationally connected to at least one audio signal input tab (left and right inputs) of said wireless transmitter (McGreevy; column 1, lines 52-55).

Regarding **claim 3**, McGreevy as modified by Kuznicki further discloses said input tab being connectable to at least one external audio signal source (McGreevy; column 1, lines 52-55; column 2, lines 39-41).

Regarding **claim 4**, McGreevy as modified by Kuznicki further discloses and wherein said audio signal source is at least one of a microphone, an audio player and an Internet connection device (McGreevy, column 1, lines 52-55; column 2, lines 39-41).

Regarding **claim 5**, McGreevy as modified by Kuznicki further discloses wherein said generator unit comprises a modulator unit (McGreevy; 16 and 16') with a carrier frequency signal input (McGreevy; 36, Figure 1) and an output being operationally connected to said output of said generator unit (Figure 1) and having a modulation input, said modulation input being operationally connected to said input for said encoded audio signal (McGreevy; Figure 1).

Regarding **claim 6**, McGreevy as modified by Kuznicki further discloses wherein said generator unit generating said signal to be transmitted as an amplitude-modulated

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signal, a frequency –modulated signal, a phase-modulated signal or a modulated pulse signal (McGreevy; abstract).

Regarding **claim 9**, McGreevy as modified by Kuznicki fails to disclose wherein said audio signal to control signal decoder receives an encoded audio signal in a frequency range of 100 Hz to 20 kHz. It is well known in the art that CD players can supply music within the claimed range. It would have been obvious to modify McGreevy so that the audio signals supplied are in range of 100Hz to 20Khz in order to be able to process signals from the CD source.

Regarding **claim 10**, McGreevy as modified by Kuznicki further discloses wherein said frequency band comprises more than one carrier frequency of said signal to be transmitted (McGreevy; implicit; column 3, lines 2-7).

Regarding **claim 11**, McGreevy as modified by Kuznicki further discloses a manually operable selection unit with an output operationally connected to a control input of a carrier frequency generator unit, said control input controlling selection of the carrier frequency of said signal to be transmitted, out of said more than one carrier frequency (McGreevy; manually controllable reactive components 54, Figure 1; column 3, lines 2-7).

Regarding **claim 12**, McGreevy as modified by Kuznicki further discloses wherein said encoded audio signal defining more than one carrier frequency in said frequency band (McGreevy; implicit; column 3, lines 2-7).

Regarding **claim 13**, McGreevy as modified by Kuznicki discloses a hearing system (McGreevy; wireless compact disc stereo playback system) comprising:

An ear device (McGreevy; sound system of vehicle) with an output electrical to mechanical converter (McGreevy; vehicle speakers inherent; column 2, lines 10-11) and with a wireless receiver (McGreevy; FM radio, antenna/receiver of automobile), the output thereof being operationally connected to said electrical to mechanical converter (McGreevy; column 2, lines 10,11;inherent);

A wireless transmitter (McGreevy; Figure 1) according to one of the claims 1 to 12 (See above apropos rejection of claim 1), a signal transmitted from said wireless transmitter being received and demodulated at said ear device and acting on said electrical to mechanical converter (McGreevy; Figure 1; column 2, lines 2-11; column 3, lines 8- 18).

7. **Claim 7** is rejected under 35 U.S.C. 103(a) as being unpatentable over McGreevy (US 5,319,716) as applied to claim 1 above and Kuznicki et al. (US 4,972,439) as applied to claim 1 above, in further view of Koike (US 6,778,814).

Regarding **claim 7**, McGreevy as modified by Kuznicki fails to disclose of a wireless transmitter further comprising at least one microphone, an output thereof being operationally connected to said input of said decoder unit. Koike teaches of wireless transmitter further comprising at least one microphone, an output thereof being operationally connected to said input of said decoder unit (Figure 2). It would have been obvious to modify McGreevy by incorporating a microphone in order to provide the capability of wirelessly transmitted voice signals.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Devona E. Faulk whose telephone number is 571-272-7515. The examiner can normally be reached on 8 am - 5 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 571-272-7848.

The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2615. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DEF



VIVIAN CHIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600